ALGORITHM – REV. *D*

SELECTING YOUR CARRIER ROOM AIR CONDITIONER

NOTE: IF THIS UNIT IS INTENDED FOR A SUN ROOM OR COMMERCIAL APPLICATION, PLEASE CONTACT YOUR LOCAL CARRIER DEALER

A. Length of room in feet

Drop Down
8 through 45

B. Width of room in feet

Drop Down
8 through 60

CALCULATE: A x B = Sq. Ft.
If Sq. Ft. $\leq$ 1700, then GOTO BTU Table # 1; Else "Your requirement cannot be satisfied on this website. Please contact your local Carrier dealer for further assistance with unit selection."

LOOK-UP: BTU Table # 1 and select BTU Size based on Sq. Ft.
BTU Size = BTU #1

C. How many square feet of glass facing outdoors are in the room?   Drop Down
(Range 10-100)

(note: length in ft. x width in ft. = sq. ft
include windows, skylights, and glass doors)

CALCULATE: **BTU # 2 = BTU # 1 + (C x 60)**
NOTE: Round down for all fractions.

D. Is room normally in sun or shade?   Sun___   Shade___
CALCULATE: If "Sun," then BTU # 3 = BTU # 2 x 1.1
If "Shade," then BTU # 3 = BTU # 2 x .95

note: If only one external wall is in the sun, enter "Shade."

E. What type of space is above the room?   Roof Only___ Attic___ Occupied Room___

CALCULATE: If roof only, then BTU #4 = BTU #3
If attic, then BTU #4 = BTU #3 x .85
If occupied room, then BTU #4 = BTU #3 x .8

F. Is room above cooled space (i.e. basement, another air-conditioned room)? Yes___   No___

CALCULATE: If Yes, then BTU #5 = BTU #4 x .8
If No, then BTU #5 = BTU #4 x .9

G. Will unit be operated during the night only?   Yes____   No____

CALCULATE: If Yes, then BTU # 6 = BTU # 5 x .65
                    If No, then BTU #6 = BTU #5

H. Enter zip code where unit will be installed _____
(note: zip codes are matched to factors to determine climate conditions in your area of the country)
     Climate Factor _____

CALCULATE: $BTU \# 7 = BTU \# 6 \times climate factor$

LOOK-UP: Table A and select map factor based on corresponding zip code. Map factor should appear in the space above where it says Climate Factor.

I. Number of people who normally occupy room   Drop Down
                                                      Range 2-8

CALCULATE: $BTU \# 8 = [(I - 2) \times 600] + BTU \# 7$

J. Is the room a kitchen?   Yes____   No____
CALCULATE: If "Yes," then $BTU \# 9 = BTU \# 8 + 4,800$
                    Else,
                    If "No," then $BTU \# 9 = BTU \# 8 + 300$

K. Will the unit be installed in a window or through-the-wall?   Window___   Wall___

L. Do you require a unit, which cools and heats?   Yes___   No____

     NOTE: THIS IS SUPPLEMENTAL HEAT. UNIT SELECTION WILL BE BASED ON YOUR COOLING REQUIREMENTS ONLY!!!

     COMPARE: If BTU # 9 is < 9001 and "L" = "Yes," then provide a test window as follows:

"At this time, Carrier does not offer a combination heat/cool unit that meets your requirements, though we are able to satisfy your cooling requirements. Would you like to eliminate your request for supplemental heat?"
                                        Yes____   No____
                    If "Yes," GOTO the Picture/Spec File.
                    Else,
                    If "No," provide a text window as follows:

"We're sorry...based on the information you have provided, Carrier cannot accommodate your combination cooling/heating needs. For further assistance, please contact your local Carrier dealer to review your air conditioning/heating requirements. Thank you."

LOOK-UP: If "K" = "Window" and "L" = "Yes," then GOTO Table # 4
                    If "K" = "Window" and "L" = "No," then GOTO Table # 2
                    If "K" = "Wall" and "L" = "Yes," then GOTO Table # 4
                    If "K" = "Wall" and "L" = "No," then GOTO Table # 3

NOTE TO PROGRAMMERS:

> IF "K" = "Window" and "L" = "Yes,"
> And
> IF models selected begin with XH or XQ,
> THEN
> The Picture/Spec screen has to include the following:

"Your installation requires the purchase of a window installation kit.
Part Number 73XH900001   Price $39.00

OR,

> IF "K" = "Window" and "L" = "Yes,"
> And
> IF models selected begin with YH,
> THEN,
> The Picture/Spec screen has to include the following:

"Your installation requires the purchase of a window installation kit.
Part Number 73YH900001   Price $39.00

OR,

> IF "K" = "Window" and "L" = "Yes,"
> And
> IF models selected begin with YH, and/or XH and/or XQ
> THEN,
> The Picture/Spec screen has to include the following:

"The YH model(s) requires the purchase of the following window installation kit:
Part Number 73YH900001   Price $39.00

The XH and XQ models require the purchase of the following window installation kit:
Part Number 73XH900001   Price $39.00

SELECT APPROPRIATE UNITS BASED ON BTU # 9 AND TABLE 2, 3, OR 4
GOTO PICTURE/SPEC FILE.

TABLE # 1:

Sq. Ft.	BTU
100	5000
150	5000
151	6000
300	6000
301	8000
350	8000
351	8600
450	8600
451	10000
500	10000
501	12000
700	12000
701	14000
800	14000
801	15000
900	15000
901	18000
1300	18000
1301	21000
1450	21000
1451	24000
1700	24000

Table A

ZIP Code	Map Factor
0	0.8
1000	0.8
1999	0.8
2000	0.8
2999	0.8
3000	0.8
3199	0.8
3200	0.7
3999	0.7
4000	0.7
4999	0.7
5000	0.8
5299	0.8
5300	0.7
5999	0.7
6000	0.8
6999	0.8
7000	0.9
8999	0.9
10000	0.9
11999	0.9
12000	0.7
12999	0.7
13000	0.8
14999	0.8
15000	0.8
15999	0.8
16000	0.9
17999	0.9
18000	0.8
18999	0.8
19000	0.9
19999	0.9
20000	1
20099	1
20100	0.9
20999	0.9
21000	0.75
21999	0.75
22000	1
24999	1
25000	0.9
26999	0.9
27000	1
28399	1
28400	0.9
28999	0.9
29000	1
29999	1
30000	1
31999	1
32000	0.975
32999	0.975
33000	0.95
34999	0.95

35000	1
36999	1
37000	1
37999	1
38000	1.1
38999	1.1
39000	1.05
39999	1.05
40000	0.95
42999	0.95
43000	0.9
45999	0.9
46000	0.9
46999	0.9
47000	1
47999	1
48000	0.9
48999	0.9
49000	0.75
49999	0.75
50000	1
51999	1
52000	0.9
52999	0.9
53000	0.9
53999	0.9
54000	0.75
54999	0.75
55000	0.9
56999	0.9
57000	1.05
57999	1.05
58000	0.95
58999	0.95
59000	1
59199	1
59200	0.9
59599	0.9
59600	0.8
59999	0.8
60000	0.9
61999	0.9
62000	1
62999	1
63000	1
65999	1
66000	1
66999	1
67000	1.2
67999	1.2
68000	1.1
69999	1.1
70000	1
70999	1
71000	1.1
71999	1.1
72000	1.2
72999	1.2
73000	1.2
74999	1.2

75000	1.2
79999	1,2
80000	1
81999	1
82000	0.9
82999	0.9
83000	1
83999	1
84000	1
84999	1
85000	1.4
85499	1.4
85500	0.9
86199	0.9
86200	1.25
86999	1.25
87000	1
87999	1
88000	1.1
88999	1.1
89000	1.25
89299	1.25
89300	0.85
89499	0.85
89500	1
89899	1
89900	0.85
89999	0.85
90000	0.8
90999	0.8
91000	1.1
91999	1.1
92000	0.8
92199	0.8
92200	1.4
92399	1.4
92400	1.25
93099	1.25
93100	0.8
93199	0.8
93200	1.25
93999	1.25
94000	0.8
94999	0.8
95000	1.15
95999	1.15
96000	1.1
96699	1.1
96700	1
96999	1
97000	0.85
97999	0.85
98000	0.7
98599	0.7
98600	0.85
98799	0.85
98800	1
99499	1
99500	0.7
99999	0.7

TABLE # 2: Cooling Only Units

If BTU # 9 is	Select
3000 to 5200	UCA051B
	TCB051B
	TCA051B
5201 to 7000	LCA061P
	UCB061B
	TCA061D
	PCA061D
7001 to 9000	UCD081B
	TCA081D
	TCA081P
	53SSB009-1
9001 to 11000	TCA101D
	GCA101B
	53SSB009-1
11001 to 13000	TCA121D
	GCA121B
	GCA123B
	XCB121E
	XCB121R
	462AJC012BA
	DCA131G
13001 to 14000	DCA141D
14001 to 16500	DCA153D
	462AJC015BA
16501 to 19000	XCB183D
	XCB183E
	462AJC018BA
19001 to 22000	DCA213D
	YCA213R
	462AJC021BA
	YCB213E
22001 to 25000	JCA243D

TABLE # 3: Through Wall Units

If BTU # 9 is	Select
3000 to 5200	UCA051B
5201 to 7000	UCB061B
7001 to 9000	UCD081B
9001 to 11000	GCA101B
11001 to 13000	GCA121B
	GCA123B
	XCB121E
	XCB121R
	462AJC012BA
	DCA131G
13001 to 14000	DCA141D
14001 to 16500	DCA153D
	462AJC015BA
16501 to 19000	XCB183D
	XCB183E
	462AJC018BA
19001 to 22000	DCA213D
	YCA213R
	462AJC021BA
	YCB213E
22001 to 25000	JCA243D

Table # 4: Heating Units

If BTU # 9 is	Select
3000 to 5200	N/A
5201 to 7000	N/A
7001 to 9000	N/A
9001 to 11000	XHC101D
	XQB101D
11001 to 13000	XHA123D
	XQA123D
13001 to 14000	XHA123D
	XQA123D
14001 to 16500	XHB153D
	XQB153D
16501 to 19000	XHB183D
	XQB183D
19001 to 22000	YHB243D
22001 to 25000	YHB243D